



City of Canton
Stark County, Ohio

SANITARY SEWER OVERFLOW
2009 ANNUAL REPORT



SANITARY SEWER OVERFLOW ANNUAL REPORT

DATE: 03/25/10

FACILITY NAME: City of Canton, Ohio

OHIO NPDES PERMIT NO: 3PE00000*OD

PERIOD COVERED BY REPORT: January 1, 2009 - December 31, 2009

CONTACT PERSON

NAME: James M. Dimarzio

TITLE: Superintendent

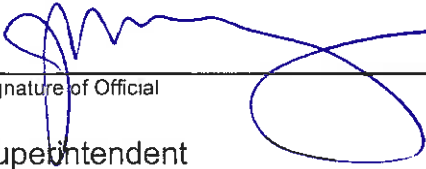
MAILING ADDRESS:

2436 30th Street NE, Building "E"
Canton, Ohio 44705

TELEPHONE: 330-489-3031

EMAIL: james.dimarzio@cantonohio.gov

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION IN THIS REPORT AND ALL ATTACHMENTS. BASED ON MY INQUIRY OF THOSE PERSONS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION CONTAINED IN THE REPORT, I BELIEVE THAT THE INFORMATION IS TRUE, ACCURATE, AND COMPLETE.



Signature of Official
Superintendent

Title

3.24.10

Date

Ohio NPDES Permit No.: 3PE00000*OD

A. Assign each SSO location a unique identification by numbering them consecutively, beginning with 301.

B. Enter name of receiving water. If an SSO enter a storm sewer, enter "SS to (name of receiving water)". If an SSO does not reach a receiving water, enter "None".

C. If an SSO has been eliminated, enter the date of elimination (MM/DD/YY)

EPA 4238 (06/06)

SSO Annual Report Table 2: SSO Event Information

Ohio NPDES Permit No.: 3PE00000*OD

[illegible]

A. Enter date as "MM/DD/YY". Enter "Various" to summarize overflows of less than 1000 gallons from an SSO location.

B. Enter the unique identification assigned in Table 1

C. Enter name of receiving water. If an SSO enters a storm sewer, enter "SS to (name of receiving water)". If an SSO does not reach a receiving water, enter "None".

D. Enter estimate of volume in MG (million of gallons). Enter estimate of total volume if summarizing data

Use additional pages as needed

SSO Annual Report Table 3: Water In Basement Occurrences

Ohio NPDES Permit No.: 3PE00000*OD

Sewershed ^A	WIB Occurrences ^B		Causes ^C
	Private	Public	
1 SW	3	3	R
2 SW	4	1	G, B
3 SW	15	1	G, B
4 SW	2		
5 SW	6	1	G, B
6 SW	12	4	G, B
7 SW	18	1	G, B
8 SW	2		
9 SW	1		
10 SW	1	1	G, B
11 SW			
12 SW	5		
13 SW	1		
14 SW	4		
15 SW	7	1	G, B
16 SW			
17 SW			
18 SW			
19 SW			
20 SW	1		
21 SW	1		
22 SW			
23 SW			
1 NE	18		
2 NE	11	2	G, B
3 NE	22	1	G, B
4 NE	4	2	G, B
5 NE			
6 NE	4		
7 NE	10	3	G, B
8 NE	1		
9 NE	6		
10 NE	3		
11 NE	13	1	G, B
12 NE	12	2	G, B
13 NE	10	2	G, B
14 NE	2		
15 NE	5		
16 NE	18	3	G, B
17 NE	2		
18 NE	2		
19 NE		1	G, B
20 NE	4		
21 NE	2		
22 NE	1		
23 NE			
24 NE			

A. A sewershed is a specific geographic area, such as a city block or a subdivision, that drains to a common outlet.

B. Enter the total number of water in basement occurrences reported for the sewershed.

C. Enter all causes that apply W= extreme weather; E = equipment failure; P = power failure; D = debris in line; R = roots; G = grease; B = other blockages; L = line deterioration; V = vandalism; O = other, provide details

Use additional pages as needed.

SSO Annual Report Table 3: Water In Basement Occurrences

Ohio NPDES Permit No.: 3PE00000*OD

Sewershed ^A	WIB Occurrences ^B		Causes ^C
	Private	Public	
1 NW	5	3	G, B
2 NW	10	2	G, B
3 NW	11		
4 NW	6	3	G, B
5 NW	27	6	G, B
6 NW	8		
7 NW	18	6	G, B
8 NW	18	2	R, L
9 NW	1		
10 NW	6	1	G, B
11 NW	16	2	G, B
12 NW		2	G, B
13 NW	4		
14 NW	9		R
15 NW	4		
16 NW			
17 NW	3	3	G, B
18 NW	1	1	G, B
19 NW	6	1	G, B
20 NW			
21 NW	4		
22 NW			
23 NW	4		
24 NW			
1 SE	4	1	G, B
2 SE	3	1	G, B
3 SE			
4 SE			
5 SE	3		
6 SE	4		
7 SE	2	1	G, B
8 SE			
9 SE	9		
10 SE	16	1	G, B
11 SE	2		
12 SE	2		
13 SE			

Note - Per City Ordinances, sanitary laterals are private to the connection with the mainline sewer. Therefore, it is often difficult, if not impossible, to determine the cause of the "Private" WIB. For the purposes of this report, we have only included causes of "Private" WIBs if they are known by our department.

A. A sewershed is a specific geographic area, such as a city block or a subdivision, that drains to a common outlet.

B. Enter the total number of water in basement occurrences reported for the sewershed.

C. Enter all causes that apply: W= extreme weather; E = equipment failure; P = power failure; D = debris in line; R = roots; G = grease; B = other blockages; L = line deterioration; V = vandalism; O = other, provide details.

Use additional pages as needed

Enter narrative analysis of WIB patterns by location, frequency and cause.

In the past, the City has performed Inflow and Infiltration (I/I) Studies and Sanitary Sewer Evaluation Studies (SSES), via engineering consultants, to evaluate the condition of the sanitary sewer system. In these studies, the system was divided into several sewersheds. The enclosed drawings, collectively called Attachment A, identify the sewersheds as included in the previous SSES's. For the purpose of this annual report, we have utilized these sewersheds to determine the number of Water in Basement (WIB) occurrences reported in each. Areas outside of the limits of the previous engineering studies have since been added in a manner consistent with the previous studies.

We have also created spreadsheets and charts of each reported WIB based on sewershed. This information is included in Attachments B1 through B4. Based on this information, we are performing this analysis of WIB patterns by location, frequency and cause.

In 2009, the City received 504 WIB calls from city sewer customers. Upon receipt of these calls, the Collection Systems Department (CSD) dispatched a cleaning and/or televising crew to investigate the cause of the WIB. Of the 504 calls, only 65 were determined to be caused by restrictions of sanitary flow in the main line sewer (referred to as Public WIB) due to various reasons, including debris in the line, broken/deteriorated sewers, grease and/or vandalism. The CSD then proceeded to identify and correct, when possible, the cause of the Public WIB.

On many occasions, when it was determined the public sanitary system was not the cause, the CSD crew informed the customer of apparent lateral deterioration and/or blockages. By ordinance, laterals from the building to the main line sewer connection are privately owned and maintained by the building owner. The CSD crew would recommend that the customer proceed with remediation efforts and repairs, as applicable, via a private contractor to correct private lateral deficiencies. When available, the cause of the blockage is recorded on the associated work order. However, the cause is typically unknown for a "Private WIB".

In review of the collected information, we previously investigated sewersheds that had five or more Public WIB occurrences in the reporting year. For this reporting year, there were two sewersheds that meet this requirement (5 NW & 7 NW). Following is further information for each of these areas.

The Public WIB's reported in sewersheds 5NW were all reported on separate dates. Each occurrence was related to a temporary blockage due to grit and/or grease in the main line sewer. This area does not have a history of high water or chronic blockages. However, two reports were within areas with sanitary sewers at minimal grade. This area will continue to be monitored in the future for additional reports of WIB. As warranted, additional remediation will be initiated.

The six reported Public WIB's in sewershed 7NW were also reported on separate dates. Each occurrence was related to a temporary blockage,

Enter narrative analysis of WIB patterns by location, frequency and cause.

typically due to grit and/or grease in the main line sewer. This area does not have a history of high water or chronic blockages. The sewers in the vicinity of the reported WIB's were thoroughly cleaned upon each occurrence and no additional WIB's have been reported. Therefore, we do not believe there is reason for additional maintenance or investigation to prevent additional occurrences.

2501 9th Street NW – As reported in last years annual report, on January 9, 2009, the City televised the mainline sewer on 9th Street NW between Columbus Avenue NW and Clarendon Avenue NW. This CCTV investigation identified a mainline structure problem in the approximate location of the connection for this address. On January 23, 2009, the City repaired the mainline sewer by excavating, removing and replacing the defective portion of the mainline sewer. To date, there have not been any additional problems reported for this address. We believe the repair to the mainline sewer should alleviate any future public WIB's in this area.

The City of Canton operates an old sanitary sewer system with correspondingly old private laterals. As these laterals continue to age, we will continue to receive Private WIB calls. However, the number of Public WIB calls that could have been prevented will continue to be minimized in direct correlation to the cleaning and maintenance activities performed by this Department.

Based on the enclosed information, there were not concentrated or isolated areas of reoccurring Public WIB calls. With the industry-wide emphasis given to data management, the Department will continue to monitor collected information and research areas for future improvement. Since the inception of the City's Satellite Sewer Discharge Control Program (a program formerly required in our NPDES permit), the City has reduced WIB calls by more than 75%. It is expected that as our efforts continue, we will continue to minimize the number of Public WIB's reported within the City of Canton's sanitary sewer system.

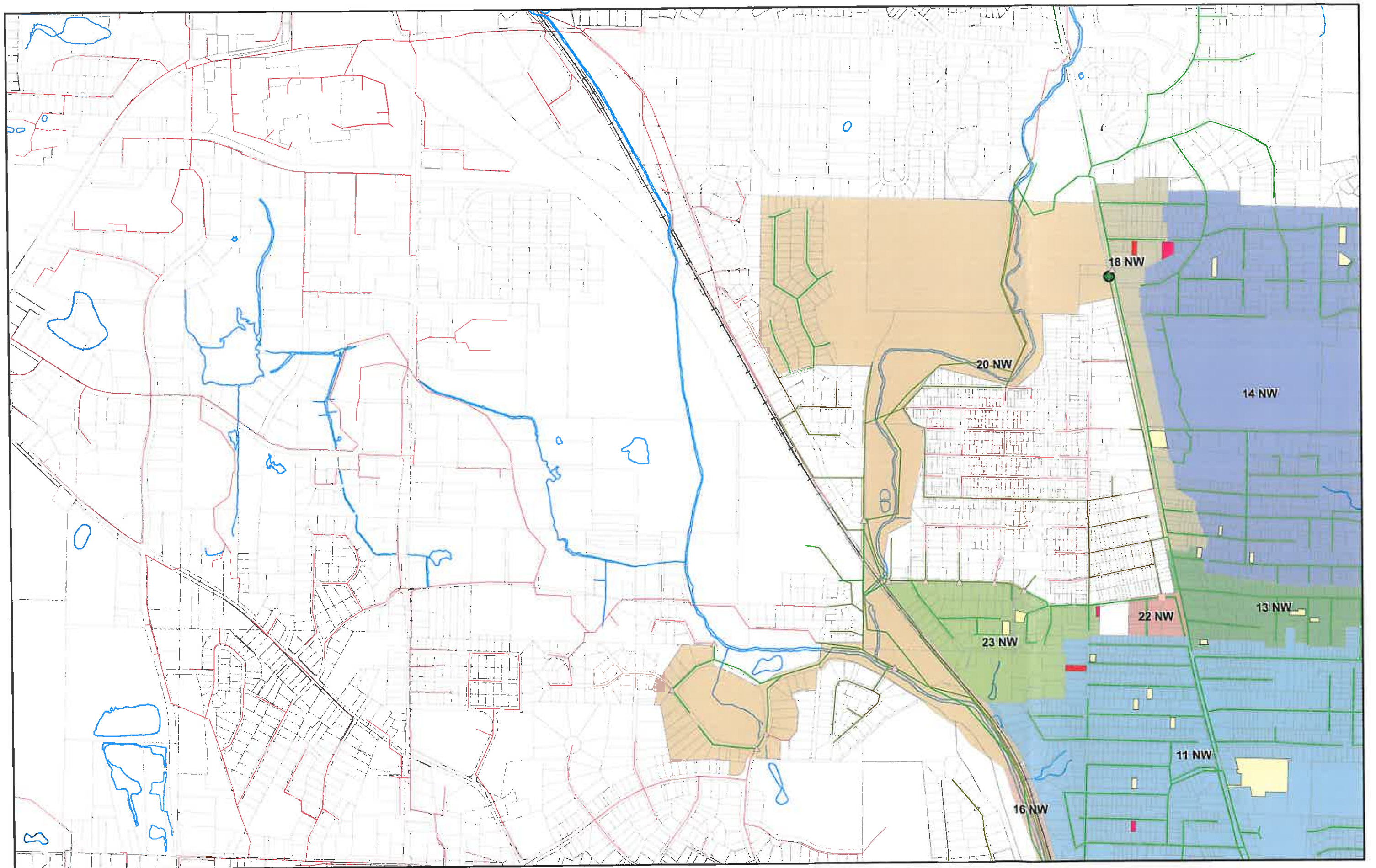
APPENDIX A



Public WIB's

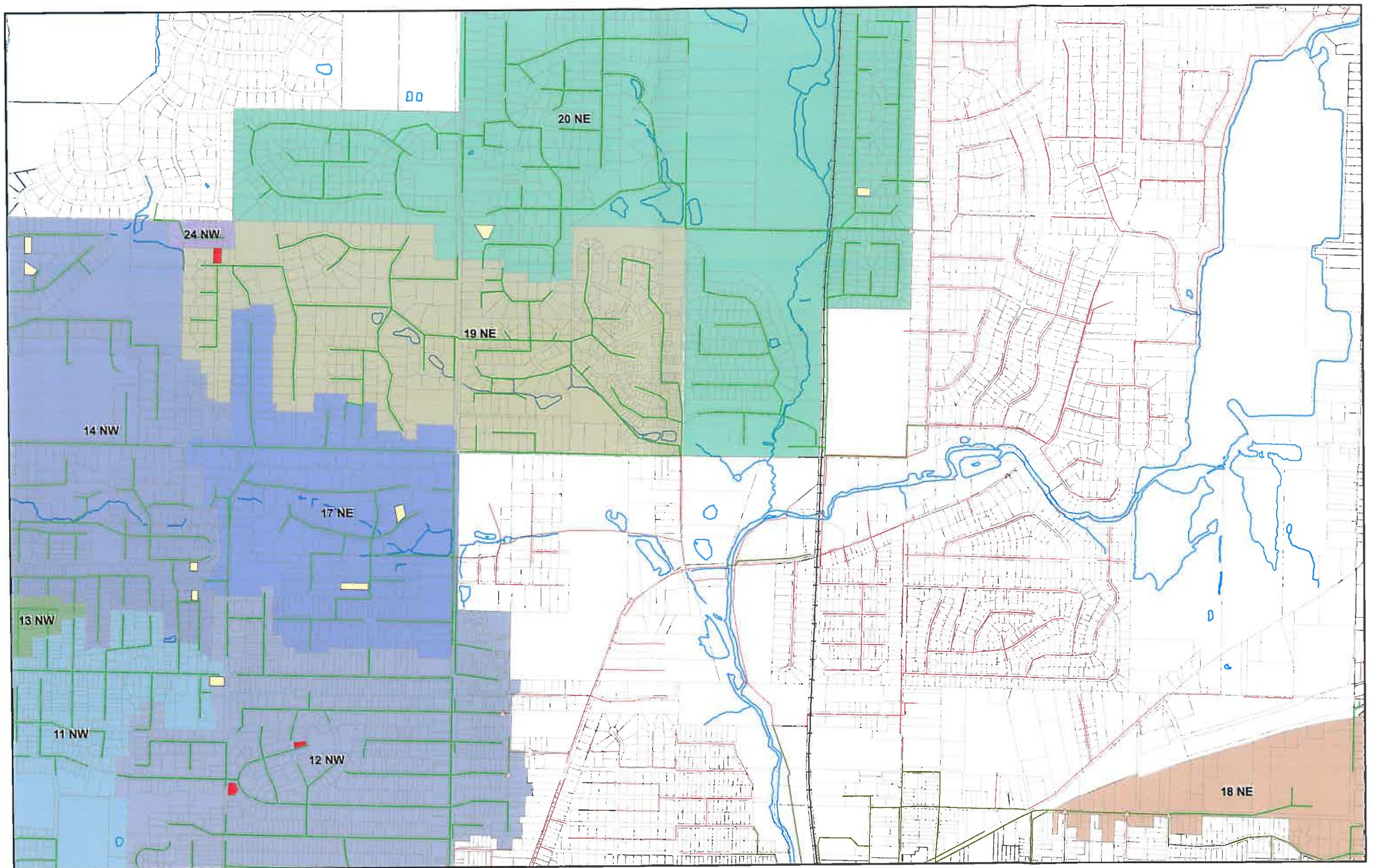


Private WIB's



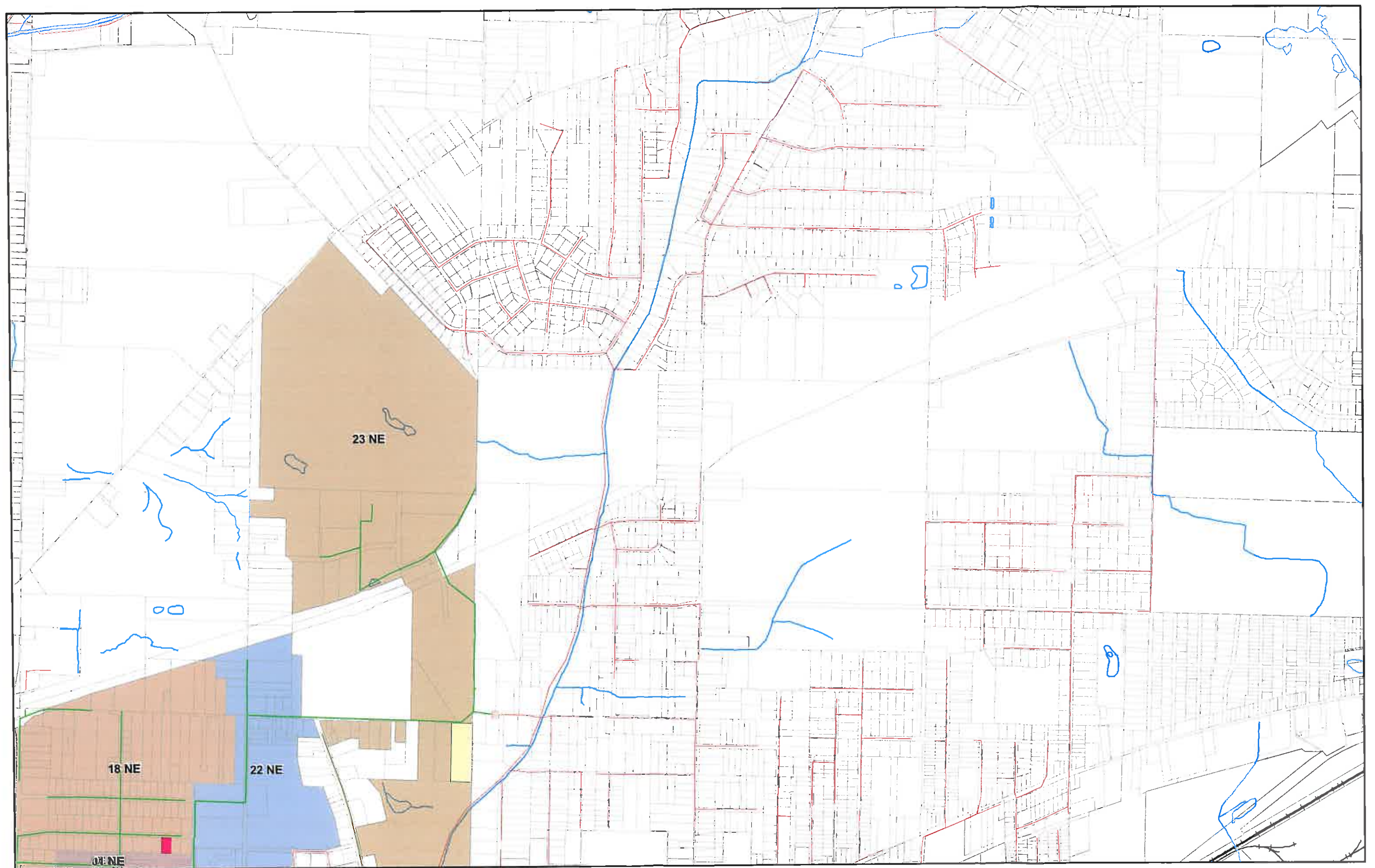
City of Canton, Ohio
WIB ANALYSIS - PUBLIC VS. PRIVATE



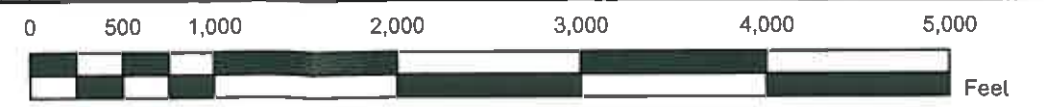


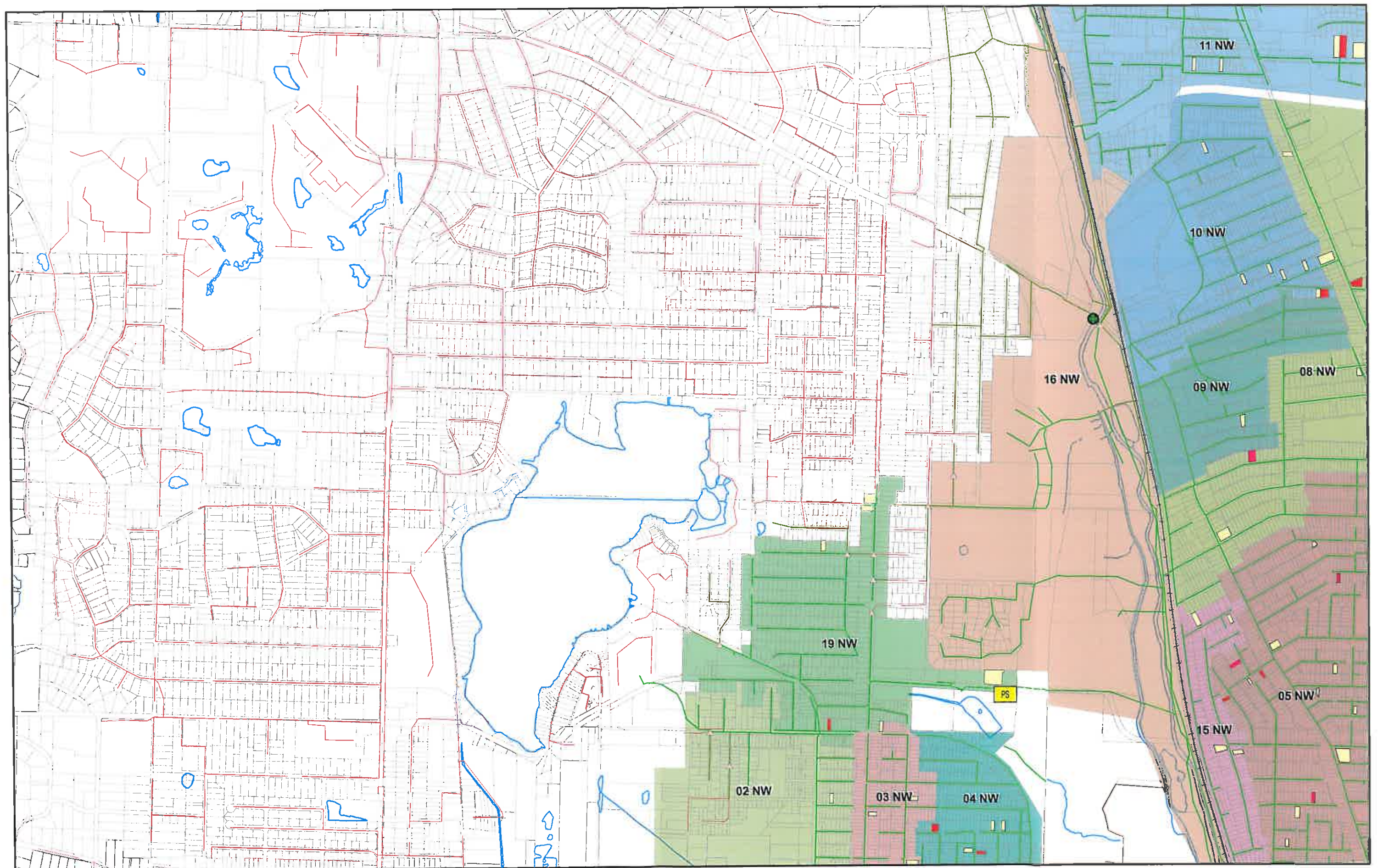
City of Canton, Ohio
WIB ANALYSIS - PUBLIC VS. PRIVATE



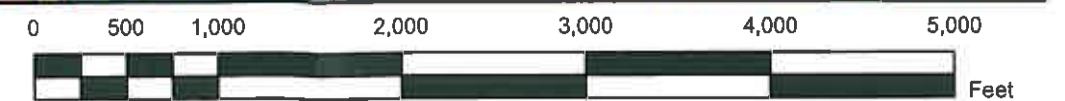


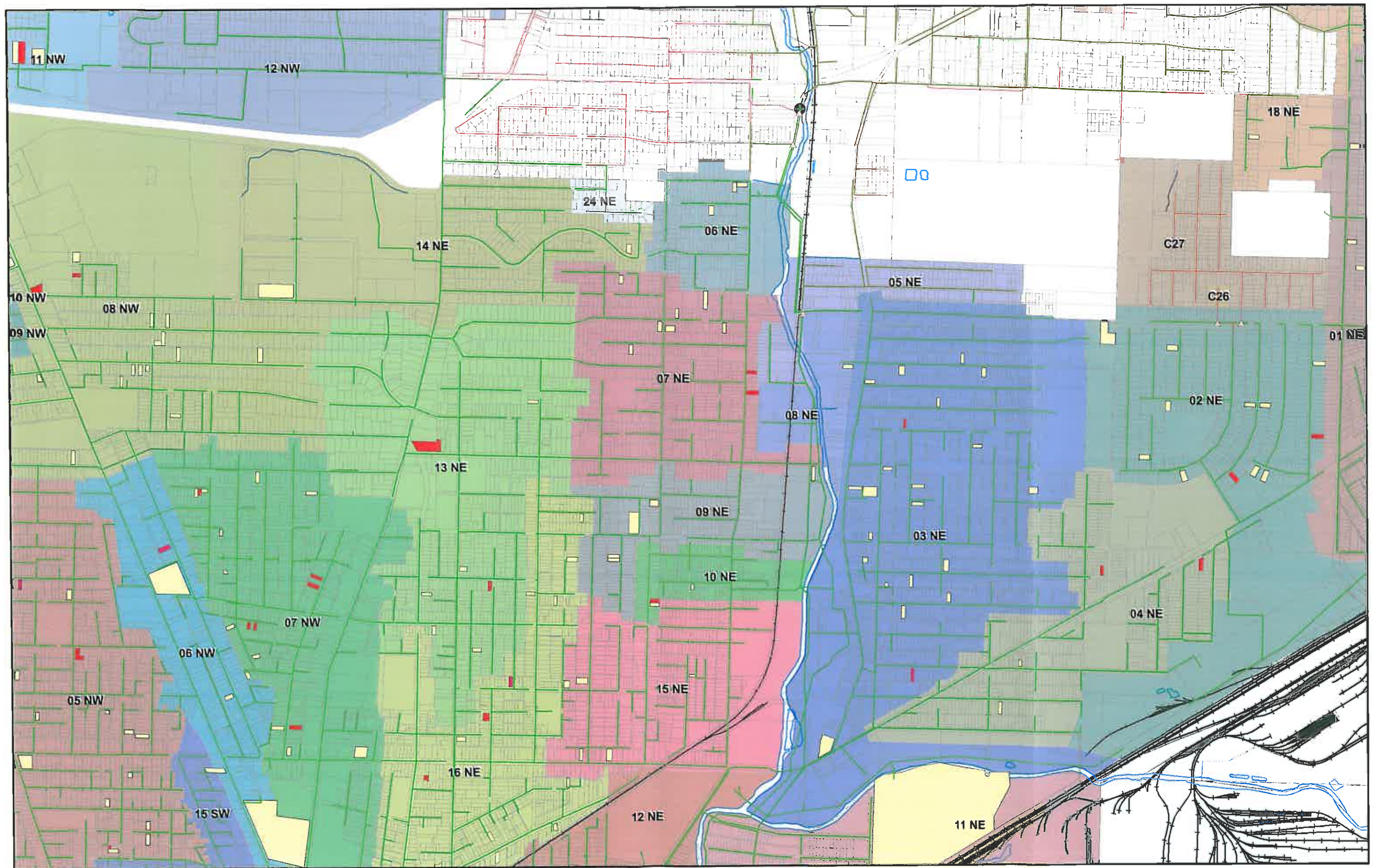
City of Canton, Ohio
WIB ANALYSIS - PUBLIC VS. PRIVATE





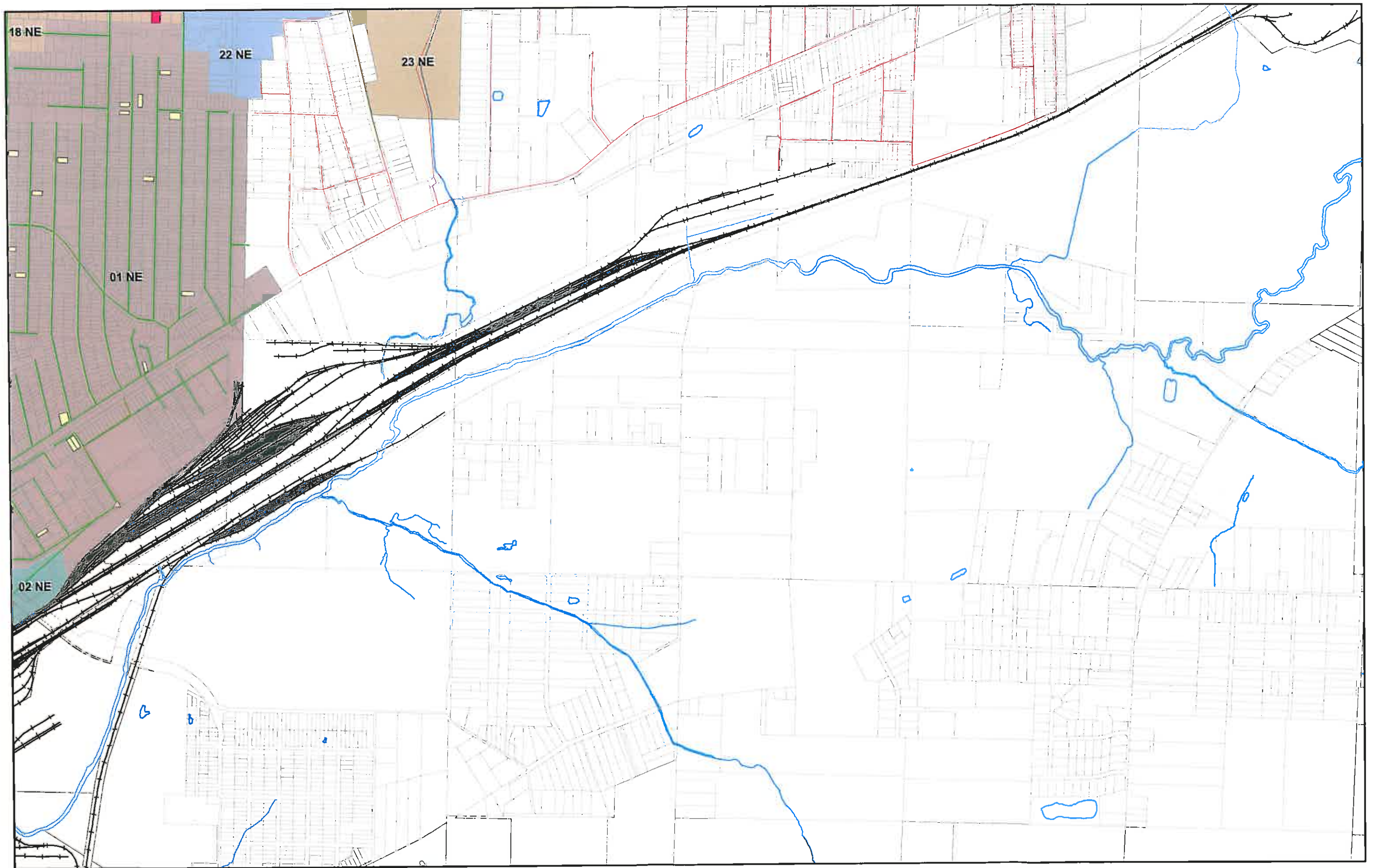
City of Canton, Ohio
WIB ANALYSIS - PUBLIC VS. PRIVATE



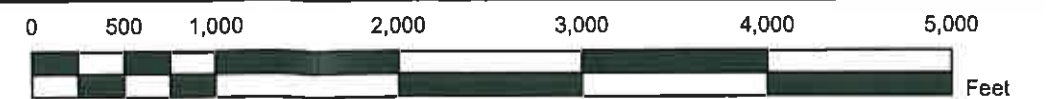


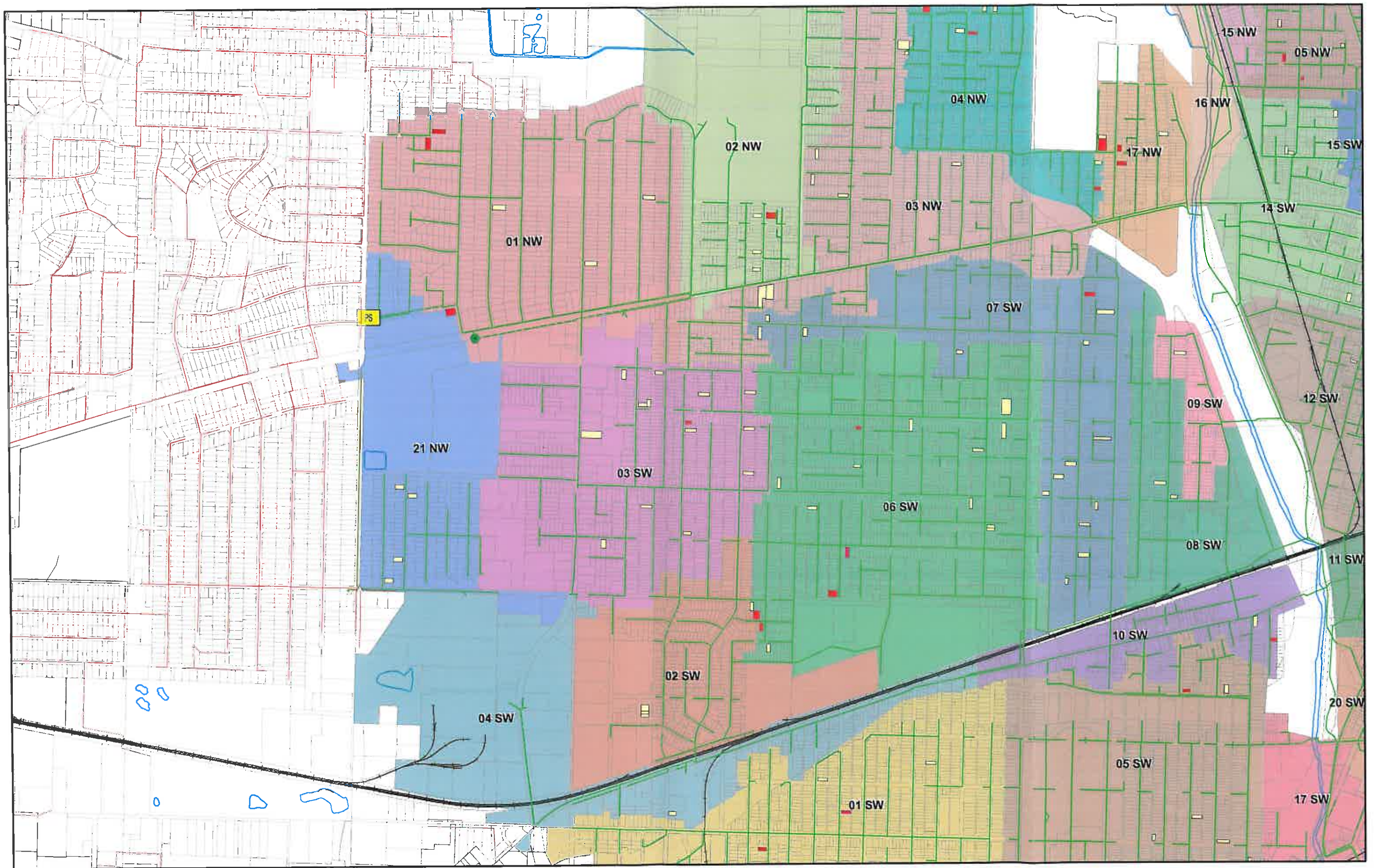
City of Canton, Ohio
WIB ANALYSIS - PUBLIC VS. PRIVATE





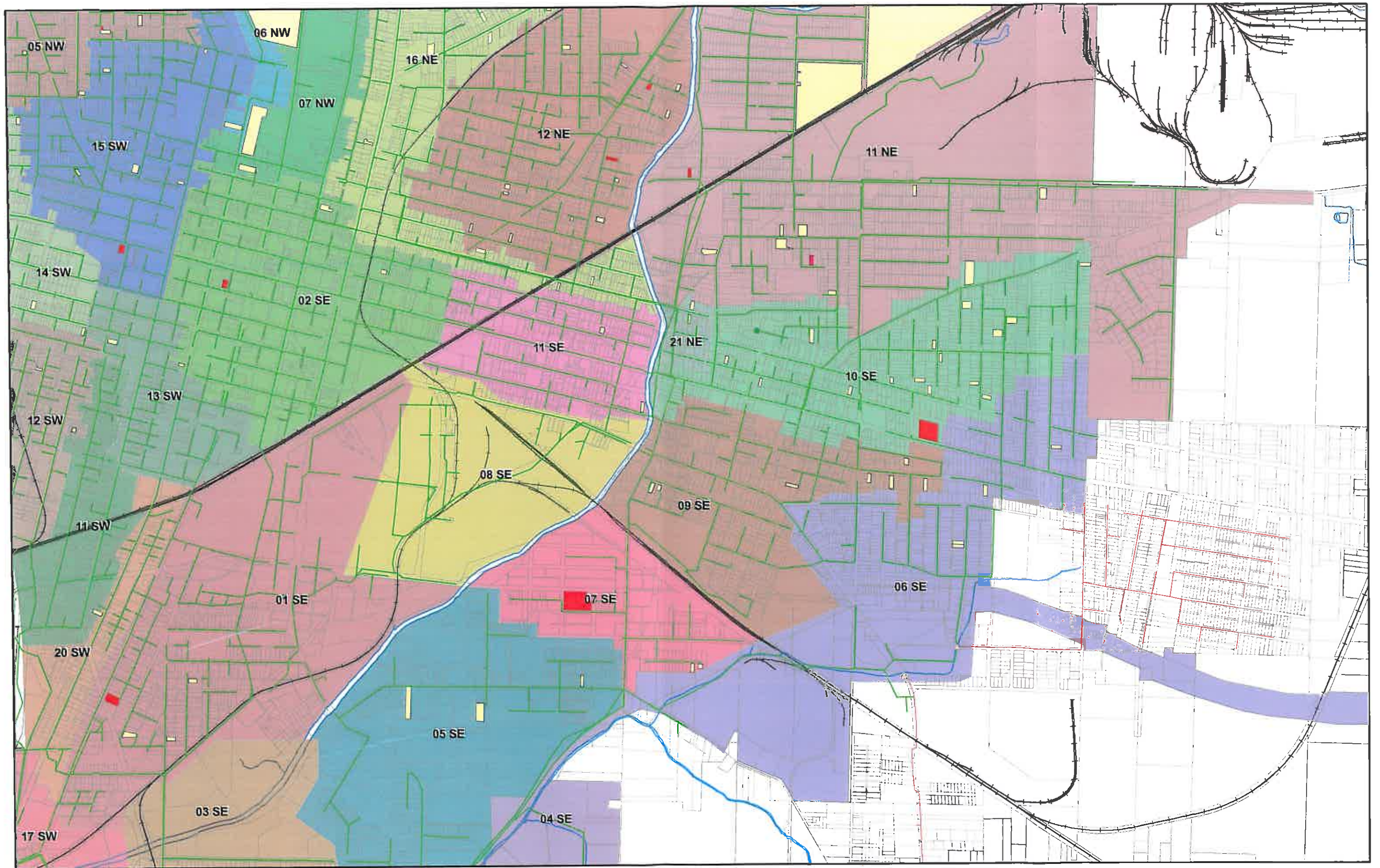
City of Canton, Ohio
WIB ANALYSIS - PUBLIC VS. PRIVATE





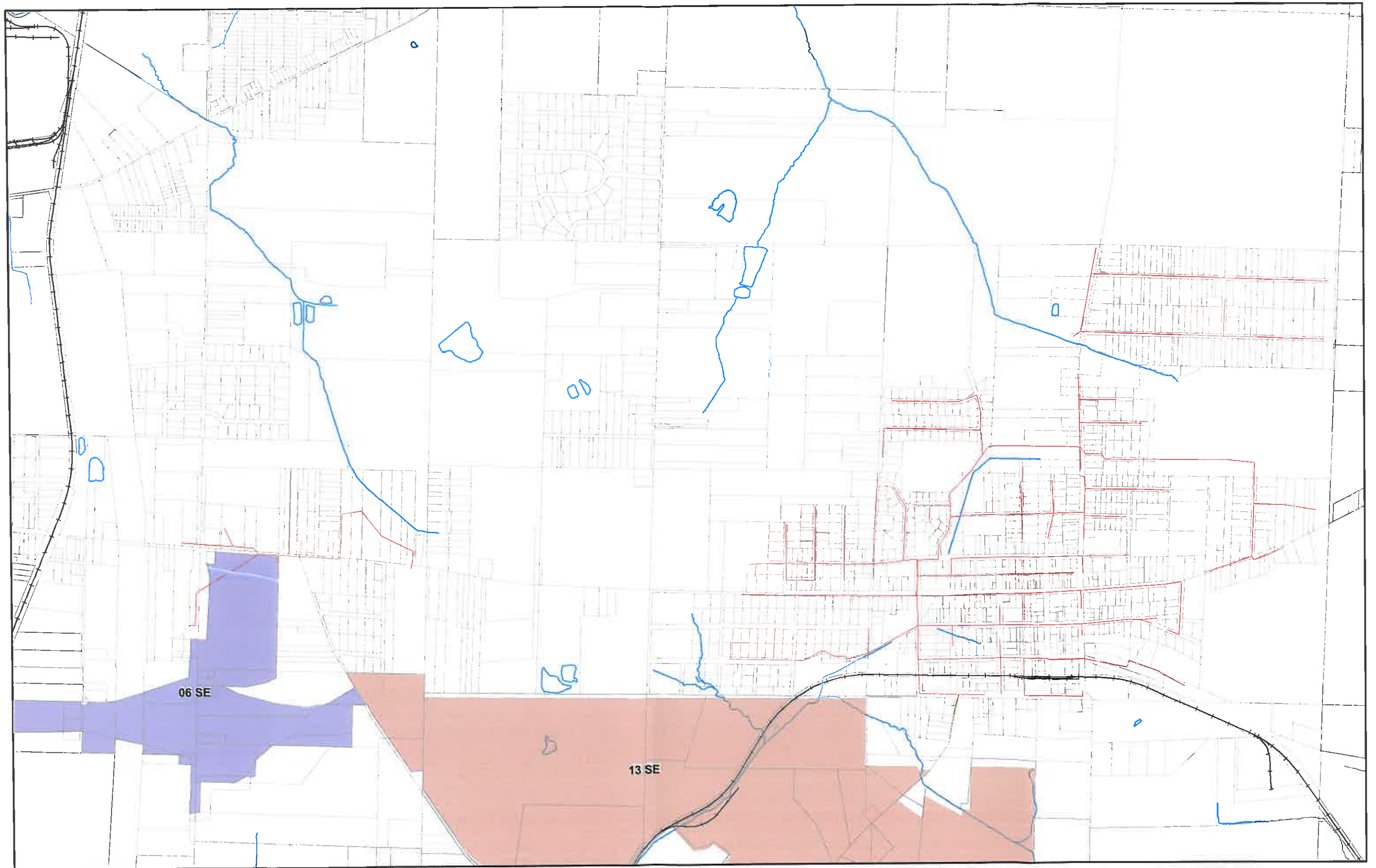
City of Canton, Ohio
WIB ANALYSIS - PUBLIC VS. PRIVATE



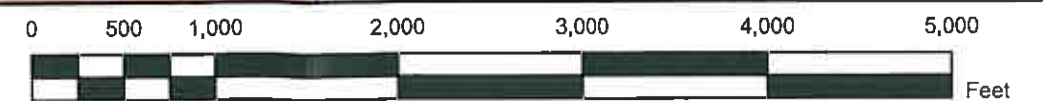


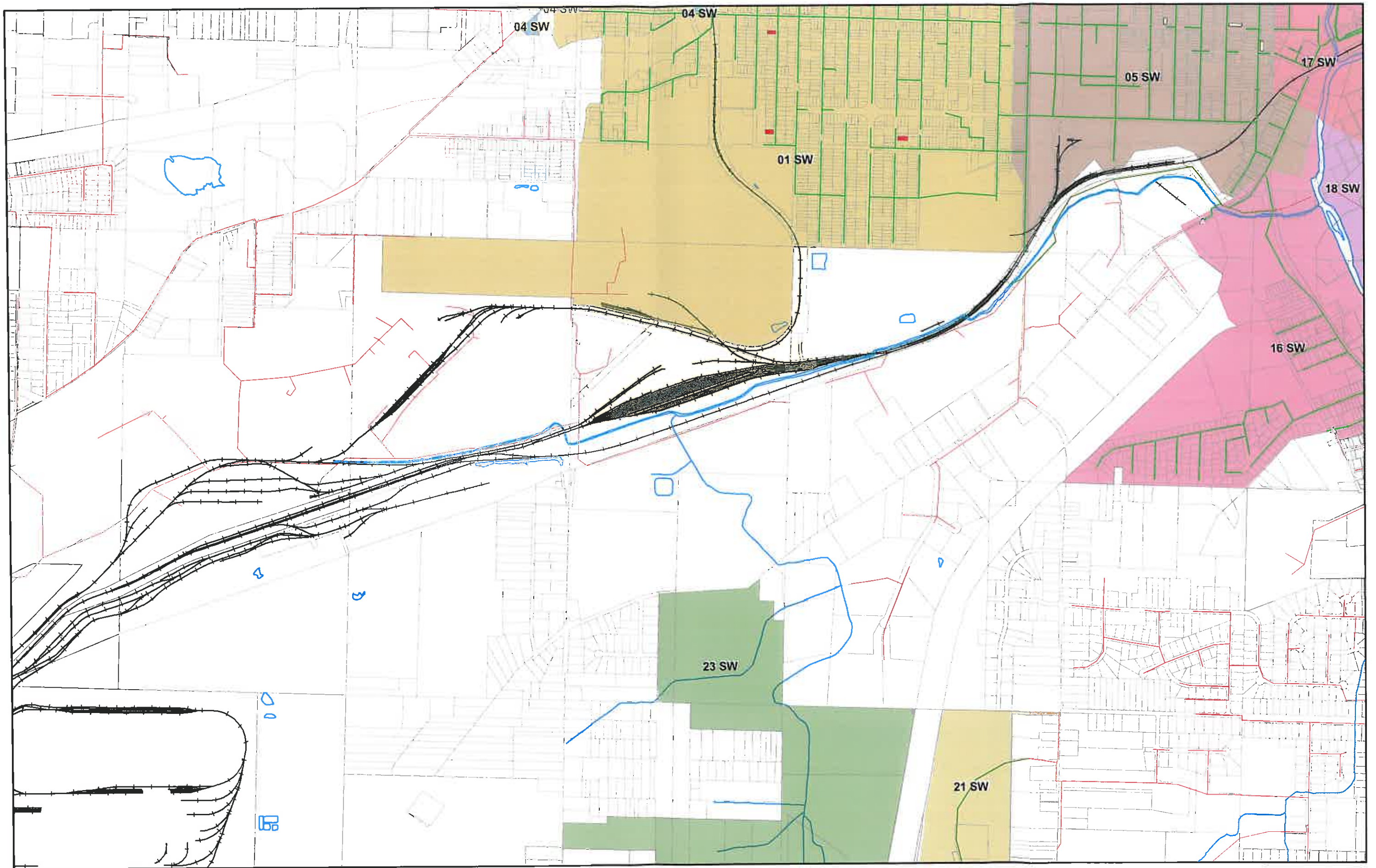
City of Canton, Ohio
WIB ANALYSIS - PUBLIC VS. PRIVATE



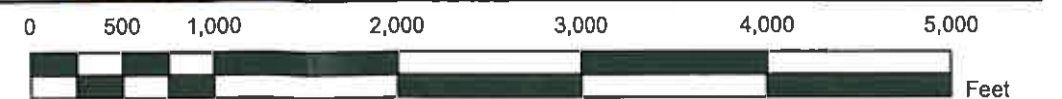


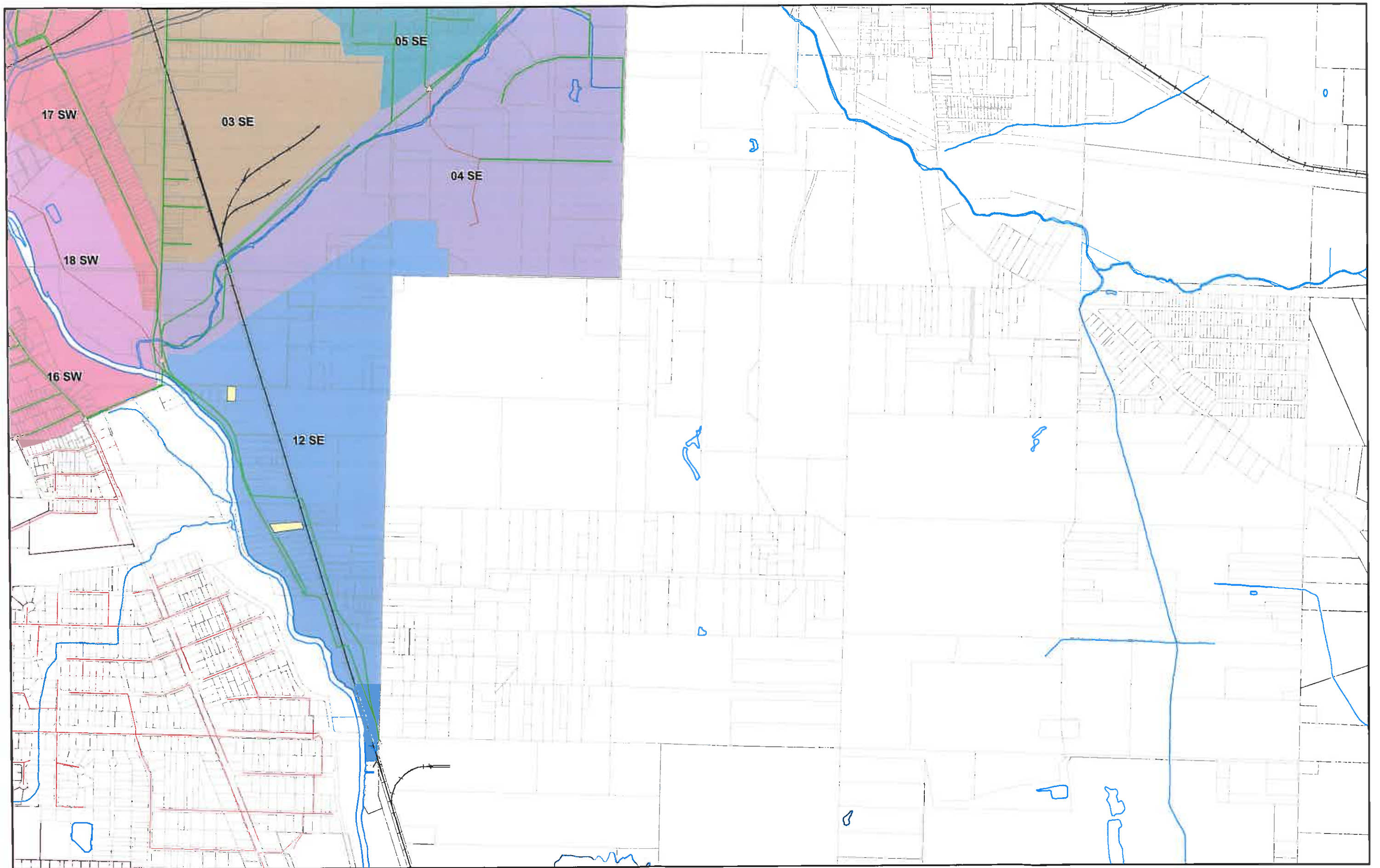
City of Canton, Ohio
WIB ANALYSIS - PUBLIC VS. PRIVATE



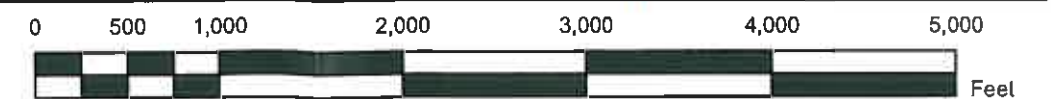


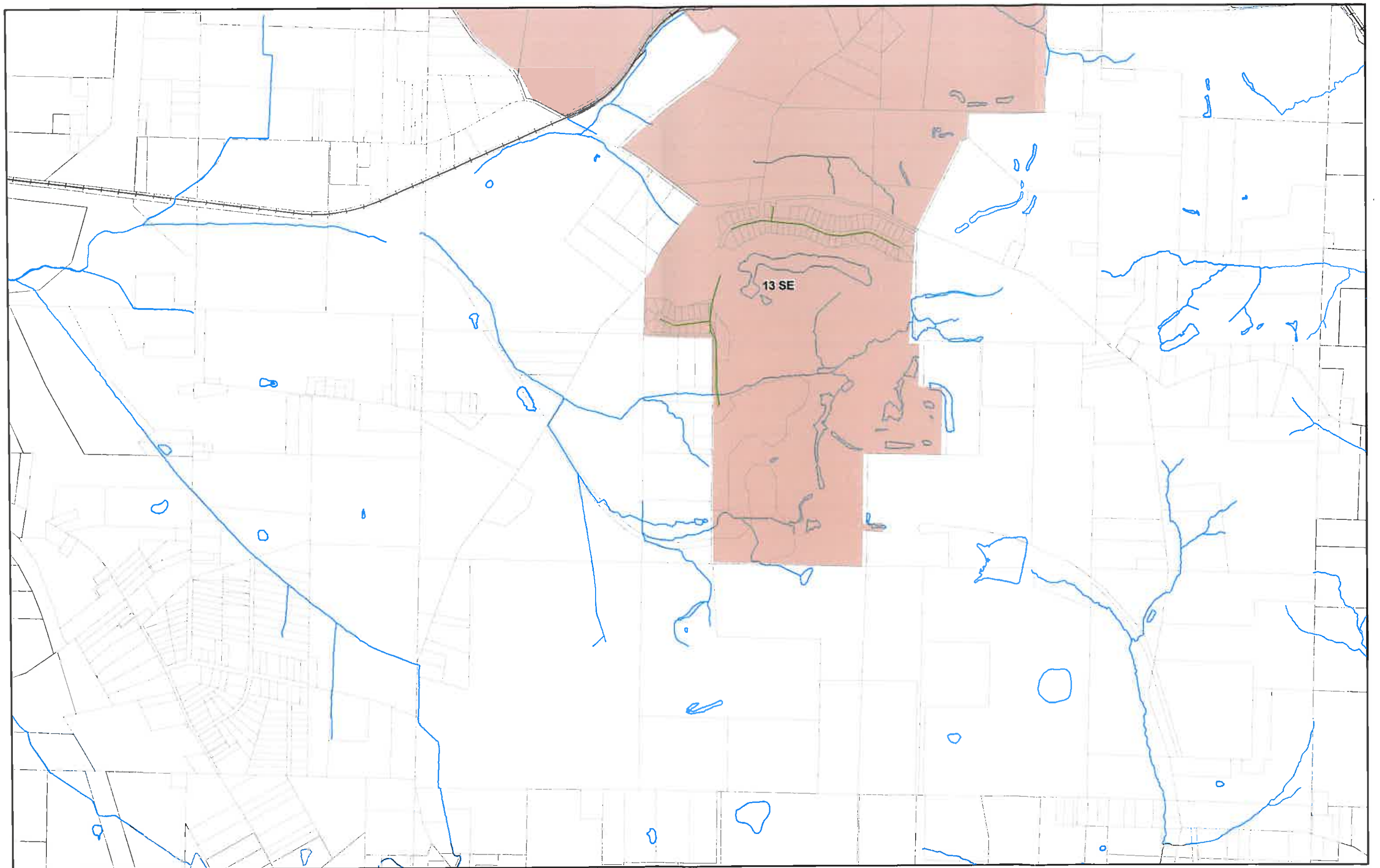
City of Canton, Ohio
WIB ANALYSIS - PUBLIC VS. PRIVATE



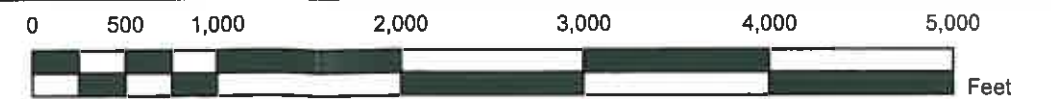


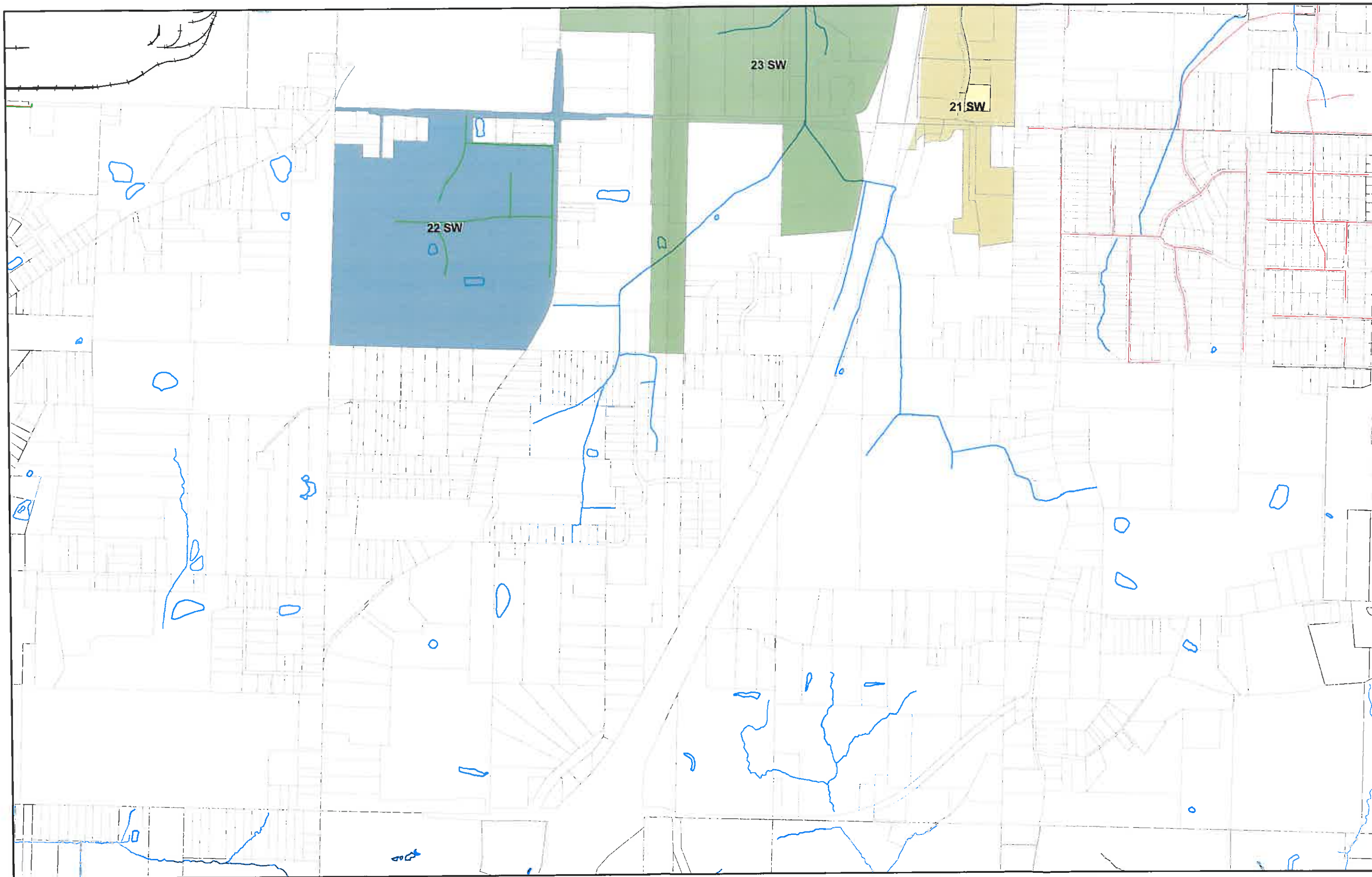
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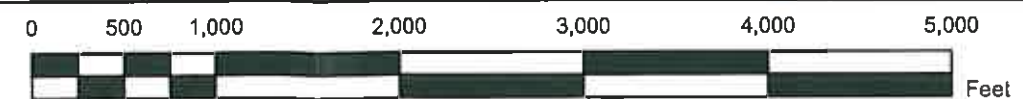


City of Canton, Ohio
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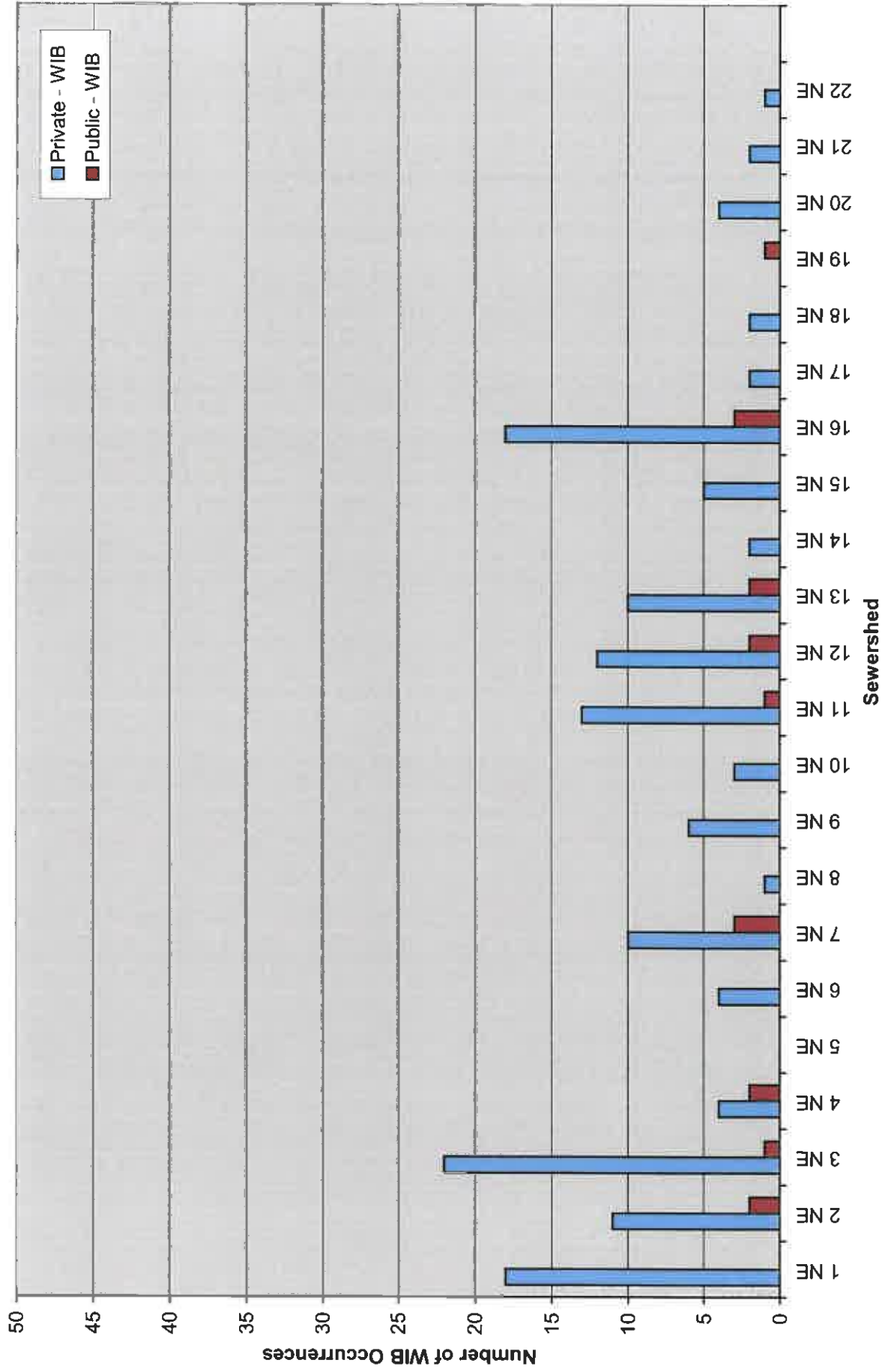


City of Canton, Ohio
WIB ANALYSIS - PUBLIC VS. PRIVATE

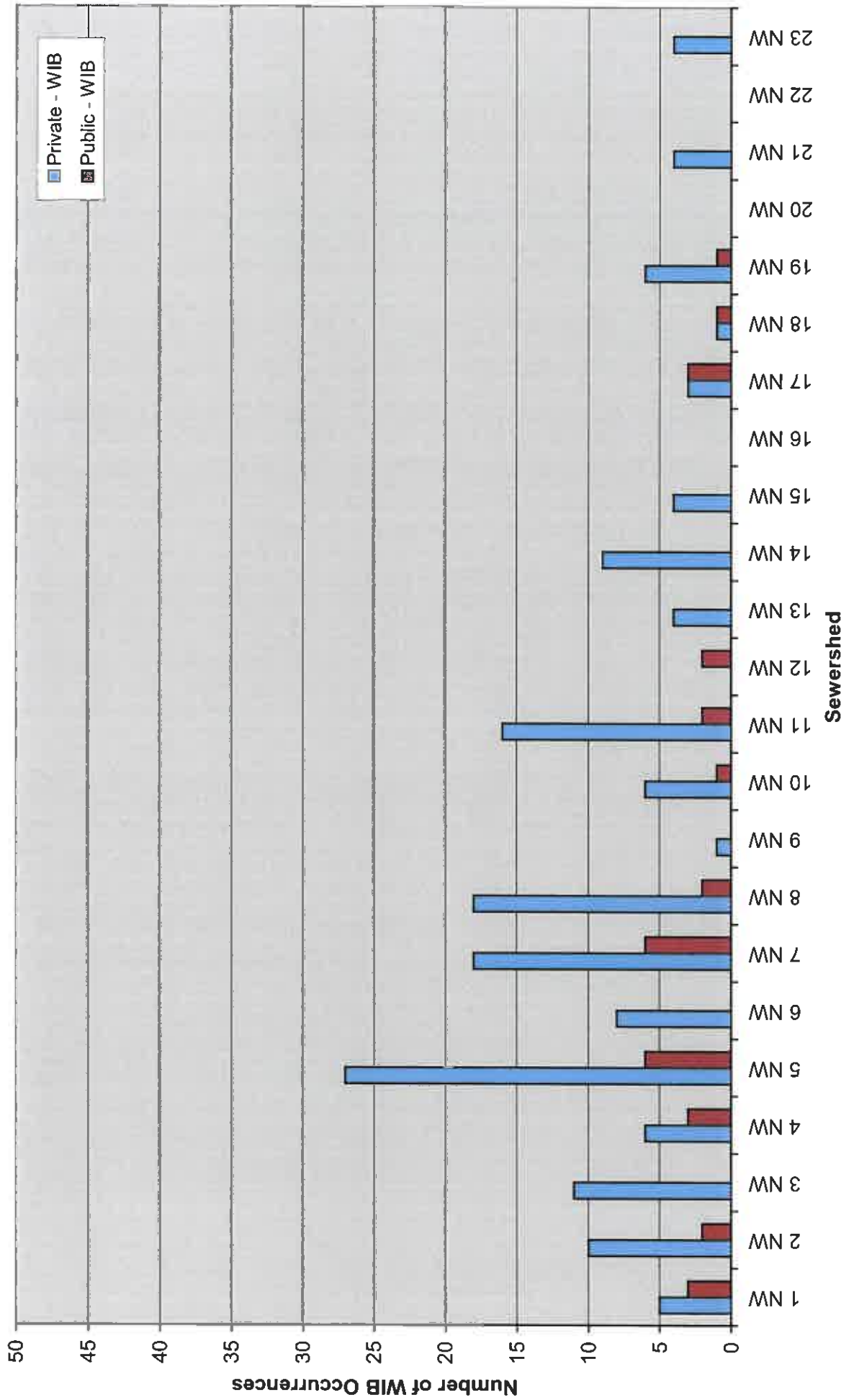


APPENDIX B

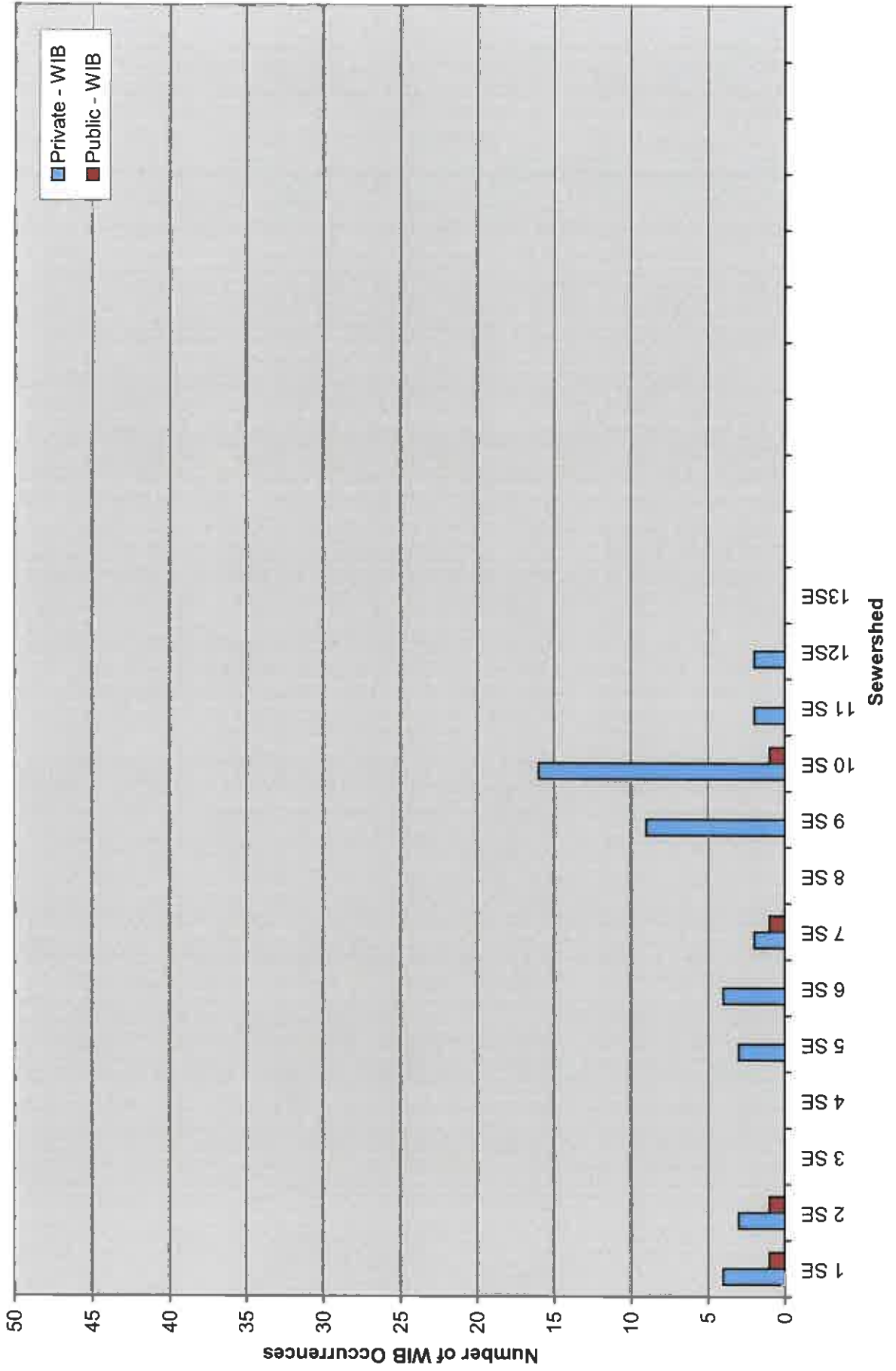
ATTACHMENT B1 WIB OCCURRENCES BY SEWERSHED (NE QUADRANT)



ATTACHMENT B2 WIB OCCURRENCES BY SEWERSHED (NW QUADRANT)



ATTACHMENT B3 WIB OCCURRENCES BY SEWERSHED (SE QUADRANT)



ATTACHMENT B4 WIB OCCURRENCES BY SEWERSHED (SW QUADRANT)

